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**Patent and Trademark Office**

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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. |
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09/414,544 10/08/99 KATAGIRI

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| M | EXAMINER |
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MM91/0601  
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| ART UNIT | PAPER NUMBER |
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WAKS, J

DATE MAILED:  
2834

06/01/00

**Please find below and/or attached an Office communication concerning this application or proceeding.**

**Commissioner of Patents and Trademarks**

# Office Action Summary

Application No.  
09/414,544

Applicant(s)  
Katagiri

Examiner  
Joseph Waks

Group Art Unit  
2834



☒ Responsive to communication(s) filed on Oct 8, 1999

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

## Disposition of Claims

☒ Claim(s) 1-13 is/are pending in the application.

Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

☐ Claim(s) \_\_\_\_\_ is/are allowed.

☒ Claim(s) 1-13 is/are rejected.

☐ Claim(s) \_\_\_\_\_ is/are objected to.

☐ Claims \_\_\_\_\_ are subject to restriction or election requirement.

## Application Papers

☒ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119

☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☒ All ☐ Some\* ☐ None of the CERTIFIED copies of the priority documents have been

☒ received.

☐ received in Application No. (Series Code/Serial Number) \_\_\_\_\_

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\*Certified copies not received: \_\_\_\_\_

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

## Attachment(s)

☒ Notice of References Cited, PTO-892

☒ Information Disclosure Statement(s), PTO-1449, Paper No(s). 2

☐ Interview Summary, PTO-413

☒ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

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## DETAILED ACTION

### *Priority*

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### *Claim Rejections - 35 USC § 112*

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. **Claims 1-10** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, line 6, "the inner surface" lacks antecedent basis.

In claim 3, line 2, "sintered oil-impregnated alloy" should be --a sintered oil-impregnated alloy--, and line 4, "the inner surface" and line 5, "the outer surface" lack antecedent basis.

In claim 4, line 5, "an extreme end thereof" is ambiguous, line 6, "one end" should be --said one end--.

In claim 5, line 2, "the end" lacks antecedent basis.

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In claim 6, line 2, "the outer surface", line 3, "the inner surface", line 4, "the end face", and line 6, "the opening end" lack antecedent basis.

In claim 7, line 4, "the outer surface" lacks antecedent basis.

In claim 8, line 2, "holds" should be --hold--.

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

5. **Claims 1-3, 11, and 12** are rejected under 35 U.S.C. 102(e) as being anticipated by **Harano et al. (US 5,736,799)**.

**Harano et al.** disclose in Figure 1 invention as claimed: a motor comprising a cup-like bearing housing 38 formed by shaping a metal sheet by drawing process (Re column 7, lines 13-25), a radial bearing 53 made of a sintered oil-impregnated alloy and a gap between an inner surface of the cylindrical portion of the housing and an outer surface of the radial bearing that may be used for storing the impregnating oil, a thrust receiving plate 51, a rotary shaft 50 supported by the radial bearing 53 and in contact with the thrust plate 51.

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***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. **Claim 6** is rejected under 35 U.S.C. 103(a) as being unpatentable over **Harano et al.** (US 5,736,799) in view of **Moritan et al.** (US 5,822,846).

**Harano et al.** disclose the motor essentially as claimed. However, **Harano et al.** fail to disclose the axially elongated grooves formed on an outer surface of the radial bearing or the inner surface of the bearing housing to communicating the spaces of the at the end of the bearing and the bottom portion.

**Moritan et al.** disclose in Figures 5(a) and 5(b) a motor having grooves 33a and 33b for the purpose of discharging the air from the bottom when inserting the bearing during installation (Re column 9, lines 63-67, column 10, lines 1-2, and column 8, lines 45-63).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to design the motor as taught by **Harano et al.** and to provide the axially elongated grooves formed on an outer surface of the radial bearing or the inner surface of the bearing housing to communicating the spaces of the at the end of the bearing and the bottom portion as

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taught by **Moritan et al.** for the purpose of discharging the air from the bottom when inserting the bearing during installation.

8. **Claim 13** is rejected under 35 U.S.C. 103(a) as being unpatentable over.

**Harano et al. (US 5,736,799)**

**Harano et al.** disclose the motor including the features for attaching the disc (Re column 1, lines 9-14). However, **Harano et al.** fail to disclose the disc hub for attaching the disc.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to design the motor as taught by **Harano et al.** and to provide the disc hub for attaching the disc since it was known in the art using the disc hub for CD players.

*Allowable Subject Matter*

9. **Claims 4, 5, and 7-10** would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2<sup>nd</sup> paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Re claim 4, the feature of the bearing house having a stepped part between the bottom portion and an end face of one end of the radial bearing and the ring-like slipping-off preventing means engaging the reduced -diameter portion of the shaft and placed between the stepped part and the radial bearing, in combination with the other limitations present, are neither disclosed or taught by the prior art of record.

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Re claim 5, the feature of the bent outward flange-like portion on an end of the bearing housing and the slipping-preventing means extending from the rotor toward the flange-like portion, in combination with the other limitations present, are neither disclosed or taught by the prior art of record.

Re claims 7-10, the feature of the stator plate including the ring-like burring portion holding an outer surface of the bearing housing, in combination with the other limitations present, are neither disclosed or taught by the prior art of record.

#### ***Prior Art***

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

#### ***Communication***

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph Waks whose telephone number is (703)308-1676 . The examiner can normally be reached on Mondays thru Fridays from 8:00am to 4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nestor Ramirez, can be reached on (703) 308-1371. The fax phone number for the organization where this application or proceeding is assigned is (703) 308-5841.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.



JOSEPH WAKS  
PATENT EXAMINER  
TC-2800

JW  
May 31, 2000